#### **B61K**

OTHER AUXILIARY EQUIPMENT FOR RAILWAYS (energy storing brakes B61H; protection of permanent way against weather influences E01B; rail cleaning, snow ploughs E01H)

#### **Definition statement**

This subclass/group covers:

All auxiliary devices and methods needed to make railways safer, faster and energy efficient.

#### **B61K 1/00**

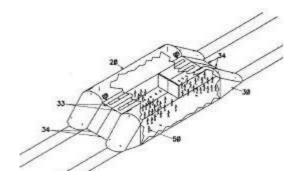
Transferring passengers, articles, or freight to and from moving trains; Slipping or coupling vehicles from or to moving trains

#### **Definition statement**

This subclass/group covers:

Transit systems and methods wherein passengers or freights board and exit during moving of vehicles or wherein rail vehicles are coupled/uncoupled during motion.

Following drawing shows one example (US2010307368):



# **B61K 3/00**

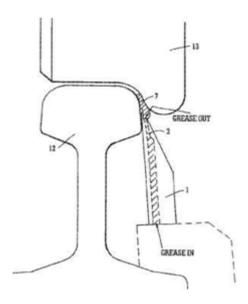
## Wetting or lubricating rails or wheel flanges

#### **Definition statement**

This subclass/group covers:

Devices and methods for the application of lubricant onto the surface of rails or wheels.

Following drawing shows one example:



#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Lubricating for vehicles	B60R 17/00
Lubrication for locomotives	B61C 17/08
Lubricating stick	C10M 105/00
Cleaning of rails	E01H
Lubricating in general	<u>F16N</u>

## **B61K 5/00**

Apparatus for placing vehicles on the track; Derailers; Lifting of lowering rail vehicle axles or wheels (hoisting apparatus B66)

#### **Definition statement**

This subclass/group covers:

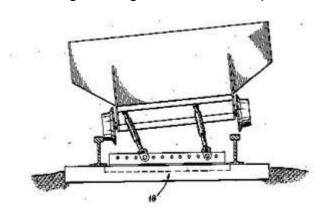
The titles of this group are self-explanatory and do not need to be more specified.

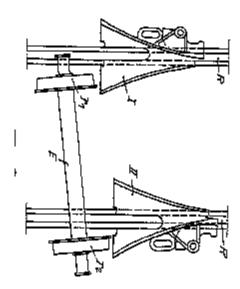
Typical examples are:

• Portable derailing device.

- Device for lifting a rail vehicle while standing on the rail.
- Re-railer apparatus for placing derailed railway vehicle back onto the track.

Following drawings show two examples:





#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Lifts	<u>B66F 7/02</u>

## **B61K 7/00**

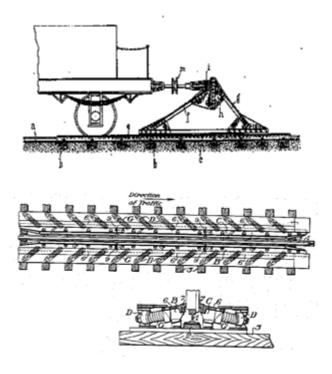
Railway stops fixed to permanent way; Track brakes or retarding apparatus fixed to permanent way; Sand tracks or the like (skids, wedges, vehicle-mounted scotch blocks B61H)

#### **Definition statement**

This subclass/group covers:

Devices and methods for retarding or stoping the movement of the railway vehicle, the devices and methods being located on the track.

Following drawings show two examples:



## B61K 7/14

#### Sand or like tracks

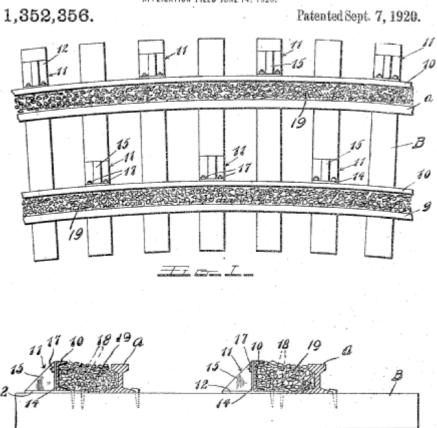
#### **Definition statement**

This subclass/group covers:

Means for retarding the railway vehicle, using sand or the like, and which are fixed to the permanent way.

Illustrative example of subject matter classified in this group:

# W. M. CREITZ. GUARD RAIL STRUCTURE. APPLICATION FILED JUNE 14, 1920.



## References relevant to classification in this group

This subclass/group does not cover:

Sanding apparatus	B61C 15/10

#### **B61K 9/00**

Railway vehicle profile gauges; Detecting or indicating overheating of components; Apparatus on locomotives or cars to indicate bad track sections; General design of track recording vehicles

#### **Definition statement**

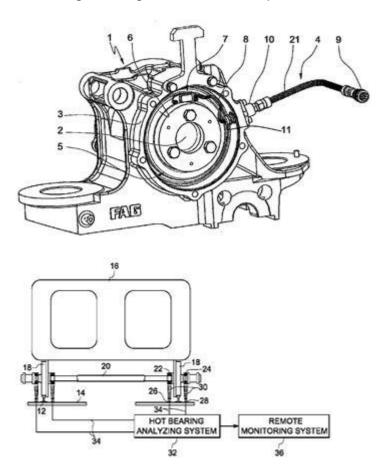
This subclass/group covers:

The titles of this group are self-explanatory and do not need to be more specified.

Typical examples are:

- Method for detecting of imbalance in wheels of rail vehicle.
- Train wheel bearing temperature detection.
- Sensors for rail vehicle wheel bearing unit.
- Method and device for contactless measurement of the deformation and wear of railroad tracks.
- Acoustic monitoring of railcar running gear.

Following drawings show two examples:



#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Manufacturing wheels	B23B 5/28, B24B 5/30, B24B 21/02
Reconditioning wheels	<u>B23B 5/32</u>
Railway wheels	<u>B60B 17/00</u>
Brake-action in case of accident	B60T 7/124

Adjusting wheel-braking force	B60T 8/00
Control, warning or safety means	<u>B61L</u>
Track-building in general	E01B
Measuring for track-building purposes	E01B 35/00
Measuring arrangements	G01B 17/00
Weighing apparatus or method	G01G 19/04 - G01G 19/06
Measuring mechanical vibrations	G01H 17/00
Radiation pyrometry	G01J 5/0022
Casings	G01J 5/04
Thermometers for measuring temperature of moving bodies	G01K 13/04
Testing of railway vehicles	G01M 17/08, G01M 17/10
Investigating in general	<u>G01N</u>
Investigating presence of flaws	G01N 25/72
Investigating of materials by using ultrasonic	G01N 29/00
Measuring spee	<u>G01P 3/00</u> .
Navigation for trains	<u>G01S 5/02</u>

## B61K 11/00

Servicing peculiar to locomotives, e.g. filling with, or emptying of, water, sand, or the like at the depots (lifting or lowering axles or wheels B61K5/00; filling stations for steam or pneumatic accumulator locomotives B61C8/00; water or fuel supply fittings on locomotives B61C17/02; refueling locomotives with solid fuels B65G67/18; washing or cleaning

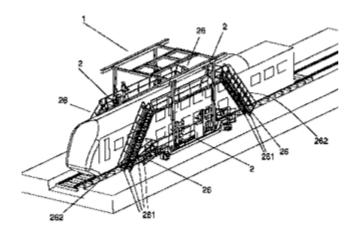
# boilers F28G)

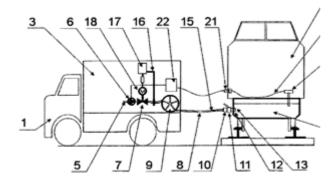
#### **Definition statement**

This subclass/group covers:

The titles of this group are self-explanatory and do not need to be more specified.

Following drawings shows two examples:





## Informative references

Attention is drawn to the following places, which may be of interest for search:

Transport or storage devices	<u>B65G</u>
Conveying materials in bulk	<u>B65G 53/00</u>

## B61K 13/00

Other auxiliaries or accessories for railways (safety belts or harnesses A62B35/00)

# **Definition statement**

This subclass/group covers:

Other auxiliary devices and methods that are not in <u>B61K 1/00</u> to <u>B61K 11/00</u>.

Following drawing shows one example:

